THE JOURNAL OF SCHOOL HEALTH

VOL. X NO. 10

DECEMBER
1 9 4 0

PUBLISHED BY
THE AMERICAN SCHOOL HEALTH ASSOCIATION

AMERICAN SCHOOL HEALTH ASSOCIATION

Organized 1927

Devoted to the interests and advancement of those engaged in school health activities and the services rendered by them

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THE JOURNAL OF SCHOOL HEALTH

Vol. X DECEMBER, 1940 No. 10

CONTENTS

The Physician As Adviser 287
Arthur R. Turner, M.D.

The Integration of Nutrition Instruction In Secondary Schools 294
Jean V. Lattimer

The Inter-Relationships of Health and Physical Education 300
Joseph E. Raycroft, M.D.

Student Accidents 307
Alvan D. Battery

Obituaries 293

Editorials 311

Abstracts 313

Review 318

Meetings 318

Index, Vol. X 319

THE JOURNAL OF SCHOOL HEALTH

Published monthly, except July and August, at Buffalo, N. Y.

THE AMERICAN SCHOOL HEALTH ASSOCIATION

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SUBSCRIPTION RATES TO THE JOURNAL

Membership dues, $2.00, including $1.75 subscription. Subscription $1.75.
Single copies 25c

Address all communications to
THE EDITOR, 3335 Main Street, Buffalo, New York

Copyright, December, 1940, by
The American School Health Association

Entered as second-class matter at the Post-Office at Buffalo, N. Y.
October 5, 1937

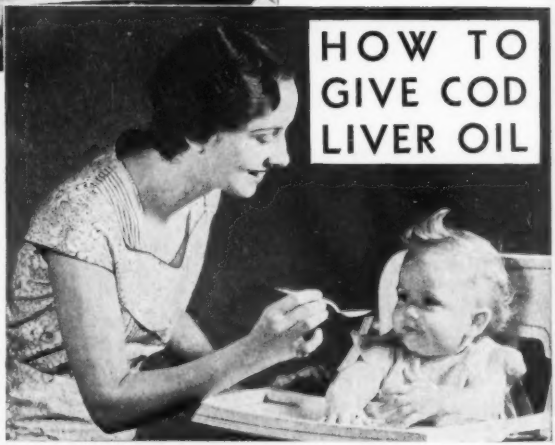
What Every Woman Doesn't Know

The mother who wrinkles her nose and "makes a face" of disgust as she measures out cod liver oil is almost certain to set the pattern for similar behavior on the part of her baby.

WHAT every woman doesn't know is that psychology is more important than flavoring in giving cod liver oil to children. Some mothers fail to realize, so great is their own distaste for cod liver oil, that most babies will not only take the oil if properly given but will actually enjoy it. Proof of this is seen in orphanages and pediatric hospitals where cod liver oil is administered as a food in a matter of fact manner, with the result that refusals are rarely encountered. Most babies can be taught to take the pure oil if the mother looks on it with favor. If the mother herself takes some of the oil, the child is further encouraged.

The dose of cod liver oil may be followed by orange juice, but usually no vehicle is required. If the oil is mixed with the milk or the cereal feeding, allowance must be made for the oil which clings to the bottle or the bowl.

If given cold, cod liver oil has little taste, for the cold tends to paralyze momentarily the gustatory nerves. As any "taste" is largely a metallic one from the silver or silver-plated spoon (particularly if the plating is worn), a glass spoon has an advantage.



SOME authorities recommend that cold liver oil be given in the morning and at bed time so as to assure an appetite for the oil, while others prefer to give it after meals in order to retard gastric secretion. If the mother will place the very young baby on her lap and hold the child's mouth open by pressing the checks together between he thumb and fingers while she administers the oil, all of it will be taken. The infant soon becomes accustomed to taking the oil without having its mouth held open. Mead's Standardized Cod Liver Oil, of minimum acidity and prepared from fresh healthy livers, is well tolerated by infants and children and is palatable without flavoring. *(To be continued)*

IN CASES OF FAT INTOLERANCE MEAD'S OLEUM PERCOMORPHUM OFFERS 100 TIMES THE POTENCY OF U. S. P. COD LIVER OIL. SMALL DOSAGE IS THUS MADE POSSIBLE.

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THE JOURNAL OF SCHOOL HEALTH

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Vol. X DECEMBER, 1940 No. 10

THE PHYSICIAN AS ADVISER*

ARTHUR R. TURNER, M.D.

Assistant Professor of Pediatrics, School Physician, Laboratory Schools, University of Chicago

School health promotion, as it is now conceived, has reached a point where there is scarcely an individual in the school system who does not contribute in some way to its health and hygiene program. School physicians have not kept abreast of the development of this program, particularly in the field of health instruction, and as a result others have sought, or had thrust upon them, responsibility for much of school health promotion. The purposes of the school health and hygiene programs are not only to preserve and to promote the health of school children by means of education and its equipment, with the aim of preventing and obtaining correction of health conditions that interfere with education, but also to enable the younger generation to develop throughout life. These purposes are but part of the larger purposes of education, to which we shall refer later.

It is the thesis of this paper that the physician should be more than a medical inspector of pupils in the school, which is his major, if not his sole, function in too many school systems today. The physician who has had postgraduate training in the field of Pediatrics, which deals with the health problems of children, is much better equipped for school health work than one who has not had such training, but further educational background of the type offered by Schools of Public Health will go far toward fitting the physician to act as adviser to school authorities in matters affecting the health of pupils. Certain minimum educational qualifications have been suggested for school physicians by a committee of the American School Health Association.[1]

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* Presented at the Joint session of the Public Health Education Section and the American School Health Association, of the 69th Annual Meeting of the A. P. H. A., October 11, 1940.

1. American Association of School Physicians; Earl E. Kleinschmidt, Committee Chairman. "TheEducational Qualifications of the School Physician." A. J. P. H. 27, 4 (Supp.): 2-16, (April) 1937.

There are a number of fundamental concepts concerning his relationships with educators which must be understood by the school physician. Time will permit mention of but a few.

1. The fact that school systems employ physicians does not mean the school is attempting to engage in the practice of medicine. The correction of physical defects of pupils, for example, is a responsibility of parents, not of the school. The school's responsibility lies in discovering such defects and urging parents, even assisting them if necessary, to find proper agencies for obtaining the desired correction.

2. A second concept is that the school is an educational enterprise. All activities carried on within the school are educational activities. Therefore, all parts of the school health and hygiene program must serve educational purposes.

3. It is necessary for the physician to have some knowledge of the administrative organization of the school system in which he is employed in order that he may know his place in that organization. Such knowledge will facilitate understanding of his relationships with the educational personnel. The administrative organization of a school system may, in one respect, be likened to military organization in that there are "staff officers" and "line officers." So far as "line officers" are concerned, direct authority descends from Superintendent to Principal to Teachers. The position of the school physician is in the staff organization. "Staff officers" are advisers to the Superintendent of Schools and serve also as advisers to each other and to the "line officers."

This description of school administration has been somewhat oversimplified purposely to bring out our third concept which is that the physician is an adviser to educational authorities.

A rigid military organization would not, in the school, foster a desirable degree of cooperation between members of the school personnel. Indeed, there is a growing feeling that democracy in school administration will be more productive of progress than will strict adherence to authoritarian principles. Educational administrators, more and more, are emphasizing cooperation and offering opportunities for interested members of the school personnel to contribute to the formulation of purposes, to the organization of plans of action, to the carrying out of such plans, and to evaluation of the educational outcomes.

Let us now turn our attention to some of the problems of school health promotion about which the physician should be pre-

pared to advise with educators. Unfortunately, time will not permit a thorough analysis of the problems, nor will the following exposition attempt an exhaustive treatment of them.

The school health and hygiene program must be planned to produce definite educational outcomes. The physician should have a comprehensive idea of the purposes of the program and its relationships to the other educational activities of the school. The details of a school health program are so well known that we need to discuss only briefly a few of its major divisions.

Preliminary to any consideration that might be given to these items and their subdivisions it must be recalled that free education in public schools is a function of the State. In consequence, there is already in existence a considerable body of legal provisions relating to school health promotion. These legal provisions vary in different localities, and what legally may be included in a school health program in one State may be forbidden in another. Knowledge of the legal provisions applying to the health program of the school system in which he is employed is essential for the physician.

Specific consideration of each of the following items would enable us to indicate a great many of the problems facing the physician as adviser, but notation in the form of an outline (which is admittedly incomplete) is all that will be attempted here.

I. *Definition and purpose of the program.*
II. *Administration.*
    A. Of the health program.
    B. Hygiene of curriculum.
        1. Schedule.
            a. Length of school day.
            b. Length of recitation periods.
            c. Arrangement of mental and physical activities.
        2. Lunch period.
            a. Time of day suitable for various age groups.
            b. Length of time allowed for pupils to eat lunch.
    C. Hygiene of instruction.
        1. Concentration of examinations at end of semester.
        2. Amount of homework.
    D. Adjustments for exceptional and handicapped pupils.
    E. Health of teachers.
        1. Physical examination and inspection.
        2. Advisory medical service.
        3. Teaching duties.

a. Pupil load.
b. Rest periods.
c. Lunch period duties.
4. Recreation.
5. In-service training for the health program.

III. *Environment.*
A. Sanitation.
B. Equipment.
1. Hygienic furniture.
2. Adjustment of seats and desks.
C. Service systems.
1. Lighting.
2. Heating and ventilation.
3. Water system.
a. Drinking fountains.
b. Handwashing facilities.

IV. *Health services.*
A. Medical and nursing services.
1. Immunization program.
2. Cooperation with community agencies.
B. Dental hygiene services.
C. Nutritional services.

V. *Health instruction.*
A. Elementary school.
1. Unit instruction.
2. Oral, visual, and auditory hygiene instruction.
B. Specific courses.
1. First aid.
2. Safety.
3. Sex education.[2]
4. Consumer education.
C. Co-ordination of health teaching.
1. Home room.
2. Manual arts.
3. Natural sciences.
a. General sciences.
b. Biology.
c. Physiology.

2. Keliher, Alice V. *Life and Growth.* D. Appleton-Century Co., 1938.

4. Social sciences.
    a. Home economics.
    b. Community hygiene.
    c. Civics.
5. Physical sciences.
    a. Chemistry.
    b. Physics.

VI. *Physical education.*
- A. Swimming program.
- B. Regular program.
- C. Interscholastic athletics.
- D. Modified program.
    1. Menstrual disorders.
    2. Rest.
- E. Corrective programs.

VII. *Mental hygiene.*
- A. Prevention of mental and emotional maladjustments.
- B. Guidance program.

VIII. *Records.*
- A. Usefulness.
- B. Research.

IX. *Evaluation.*

The foregoing discussion has been given from the point of view of the school physician. Let us now consider the function of the physician from the standpoint of education.

The school physician is a staff member acting as adviser to educators. To fulfill his function adequately the physician should have an understanding of the educational point of view. He should be at least aware of such things as educational philosophy and trends, the place of education in a democracy, its obligation and major problems. He should also be aware of forces which are in operation today that may ultimately change the traditional concepts of education.

Discussion of educational philosophy and trends will not be made a part of this paper for obvious reasons, nor can detailed consideration be given to the other educational relationships mentioned. I would, however, like to present for your consideration an educational point of view which, while not new, is being given increasing emphasis by educators, which may profoundly affect the function of the physician as adviser.

It was stated at the beginning that the purposes of the school health and hygiene programs are but part of the larger purposes of education. School health promotion enhances the effectiveness of the educational process. One of the purposes of education, embracing the social obligation of the school, is to train individuals to take an active part as citizens in a democracy. Thus it may be said that one of the important outcomes of an effective educational process should be effective citizenship. Our nation is today undergoing great social changes which must inevitably affect our schools, and forward-looking educators recognize the need for adjustment to these changes. In support of the foregoing statement, we have but to note the adjustment now taking place in the curriculum, in society, in approaches to knowledge of the individual, and in conceptions of education.

We have long prided ourselves on the large percentage of boys and girls who go through high school. How many young people are in high schools today because there is no other place for them? They can not take Horace Greeley's advice and homestead land in the west, because the government has no more free land to give away. They can not find places in industry which is so highly organized to protect the positions of older workmen. What then is the future for these boys and girls? Whatever the future may hold, the school must prepare today's youth for tomorrow's responsibilities. Viewed in the perspective just indicated, the task of education may be summed up in one word, guidance, if we use the term in its broadest sense. The guidance concept does not imply that education will lay aside its traditional function of teaching the three R's. It does, however, mean that the educational process must include much more than the teaching of the three R's.

Guidance of the pupil toward the goal of becoming an effective citizen is an educational task that will call forth the best efforts of all workers in the field of education. School physicians can and should make important contributions to the guidance activities of both administrators and teachers. The guidance efforts of physicians should proceed along three lines: First, the education or guidance of educators themselves; second, acting as consultants with educators and parents in regard to guidance problems of pupils; third, the physician should deal directly with pupils as an adviser because, among other things, such experience will better enable him to appreciate the specific problems confronting educators in their efforts to prepare pupils for citizenship in a democracy.

If we as school physicians can extend our horizons and see the problems presented by school children, not only in the light of their immediate solutions but also in the light of their social implications, and if we can use creative imagination in helping to solve these problems, we shall do our part toward accomplishing the purposes of school health promotion and of education. We shall then find educators more than ready to rely upon us as advisers.

James Huff McCurdy, A.M., M.D.,—In the death of James Huff McCurdy, A.M., M.D., at the age of seventy-four, physical education, especially in its application as a measure of health, has suffered a great loss. For forty years Dr. McCurdy was instructor and professor of physical education at the International Y.M.C.A. College at Springfield, Mass. He was a research worker, and one of the leading authorities in America on the physiology of exercise. From 1906-1929 he was Editor of the American Physical Education Review, and for many years Secretary-Treasurer of the American Physical Education Association. In the field of physical education, men of the ability, fundamental information and intellectual soundness of Dr. McCurdy are becoming extremely rare.

Allen G. Ireland, M.D., died recently at the age of fifty. Dr. Ireland had not been at all well for at least a year. His illness was superinduced by too strenuous work in his position as Director of Physical and Health Education in the New Jersey State Department of Public Instruction. Dr. Ireland was a leader in physical education, and a prominent member of the American Association for Health, Physical Education, and Recreation. Almost since its beginning, Dr. Ireland had been active in the affairs of the American School Health Association, and for a number of years had been a member of the Governing Council, and had served effectively on a number of the Association committees. He had taught at several colleges and universities. He served in the United States Navy as a Lieutenant in the Medical Corps, 1918-1920.

THE INTEGRATION OF NUTRITION INSTRUCTION IN SECONDARY SCHOOLS*

JEAN V. LATTIMER
Coordinator in Health Education,
Massachusetts Department of Public Health

In the high school we want to educate youth to function in a vocation, as a member of a family, and as a citizen. For the realization of all three of these objectives, the knowledge and practice of good nutrition is essential.

Nutrition is a specialized field and certainly in this paper there will be no attempt to treat the topic except in a general way. But if by nutrition we mean the selection of food which the child eats, the factors both external and internal which will promote the best use of such foods for the building, repair and proper functioning of his body, then it is readily seen that nutrition, besides receiving important consideration as a specific aspect of the high school curriculum, should be integrated with the classroom teaching for health.

While the home economics department contributes much, this is not enough, and unfortunately, as a rule, does not reach the majority of the boys and many of the girls. A well-planned program in home economics, natural and social sciences, together with organized classroom health instruction by the physical education teacher should enrich and enlarge each other.

Also, a well-thought-out program in any of these fields which involves health teaching should be planned jointly by the instructors in each field. Here we see one of the important reasons for a functioning faculty health council in every high school. Such a plan will tend to make the health objectives more specific and the teaching procedures better organized. Without specific organization there is a danger of loose procedures. We may integrate so well that the health teaching values may never be found. Also, we must consider whether or not the average intelligence level now found in the high school is able to comprehend all the involved learnings found in related fields. A health education curriculum committee must consider both integrated and direct classroom instruction for health.

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* Delivered at the Health Education and Nutrition Section of the Eastern Division meeting of the American Association for Health, Physical Education and Recreation at the Hotel Statler on March 28, 1940.

From the standpoint of motivation, nutrition offers many opportunities. The study of foods can be made concrete because nutrition is intimately connected with the pupil's daily living and is, in most instances, an aspect concerning health which he, himself, can improve. The ingestion, digestion, absorption, circulation, assimilation, and excretion of foods are among the most interesting aspects of physiology which can be taught to high school pupils.

I know a biology class who never seemed to understand very much about the cells of the body until, in a broad study on the nutrition of plants, animals, and man, they became interested in finding out how foods actually are built into the body.

Nutrition, as an aspect of a unit on "Personal Appearance in Relation to Social Efficiency," has proved in our state another effective approach to interesting the high school girl in eating the so-called protective foods and even, in some instances, being willing to give up a diet fad.

All girls want to have an attractive appearance, but the process that treats beauty as being only skin deep is superficial and not lasting. Beauty is blood deep, lung deep, heart deep, food deep, air deep, and sleep deep. The most captivating beauty and the most lasting is that which is not put on but which comes out. The Chinese dread losing face and so do we. The most lasting beauty is that which is based on everyday healthful living, and of all the habits which we teach for health, possibly the most important and the one busy high school girls of today are most likely to forget are nutrition, sleep, and rest.

With boys, the relation to keeping fit so as to be allowed on the athletic team has offered another approach to the study of muscle building and protective foods. One of the most fruitful opportunities for the integration of nutrition teaching which I know of in a high school has been that of relating the actual diets of the football and other athletic teams with the study of what is good food. Here we have a golden opportunity to teach nutrition in a situation ripely motivated for learning.

In general science, opportunities are offered for actual demonstration as to the food substances in starch, carbohydrates, proteins, minerals, and fats thus affording an enlargement of the understanding of food classifications.

An experiment on the food substances found in milk may be taught in science. Thus, taking milk apart is an objective way of

showing high school boys and girls why milk is often called the most nearly perfect food.

Emphasis on milk is needed in the secondary schools, for it is at that age that many boys and girls fall off in regular milk drinking. The home does not watch the practice of older children as closely. Many boys and girls grow to think milk just a baby food for the small kids, and that they do not need to drink it any longer. High school pupils should be made conscious of the fact that they are still growing and that milk is needed for their growth, protection, and attractive appearance.

In the science department a controlled rat feeding demonstration may be conducted which will illustrate concretely the effect of foods on growth and development. It is also desirable that the science department develop basic understandings as to the nature of bacteria as the background not only for teaching communicable diseases but for the understanding of the care and preservation of food.

The food cycle—a study of photosynthesis—may also be taken up in general science.

In a well-planned secondary school health education program, would it not be possible to have simultaneous related learnings regarding nutrition carried on by, say, such three related departments as a home economics, a science, and a physical education department? In the social science field, in the study of consumer education there are situations for teaching regarding the Pure Food and Drug Act, and in the evaluation of food advertisements.

In the study of economics, any course which includes budgeting should place emphasis on food values and seek the advice of the home economics teacher as to how the "food dollar" may best be spent. Both boys and girls need such education for often the father's demand, due to a lack of appreciation of the so-called protective foods, throws the family budget out of gear. Especially is this true, our nutritionists tell us, in regard to the demand for expensive cuts of meat—when, in some instances, meat stews would be as nutritious.

For some years past, there has been a committee here in Massachusetts working to develop a course of study in health education for the junior high school. This suggested course of study will soon be in print as a joint publication of the Massachusetts State Departments of Education and Public Health.

In the units concerned with the general theme of community health, specific learnings have been included regarding the preservation, care, and transportation of foods.

In the suggested units on home nursing and child care, learnings are emphasized in regard to the special features of the child's diet and of the four types of diet for a sick person.

In the series of units on practical physiology as applied to daily living, it is difficult to think of one of these units which does not have in it some integrated learnings in relation to nutrition. These are all illustrations as to how some phase of nutrition teaching really meets us at almost every turn. I am reminded here of a poem by Walter De La Mare published in his book, *"Peacock Pie,"* recently called to my attention by our Supervisor of Nutrition:

"It's a very odd thing—
As odd as can be—
That whatever Miss T. eats
Turns into Miss T;"

Also, somewhere in the high school, there should be in addition a gathering together of all the factors of nutrition under such a specific unit as "A Balanced and Protective Diet." The study to include such problems as "How is the Necessary Amount of Daily Food Measured?" "What Are the So-Called Protective Foods?" "What is the Meaning of a Balanced Diet" and for the last problem, "The School Lunch—What Does It Mean to You?"

The pupils, of course, will already possess some information regarding the food needs of the body, since the topic has in previous years been introduced from various angles. However, since there is much essential material on nutrition which is more advanced than should possibly be taught to the younger pupil, the topic should again be studied in order to emphasize some of the more advanced aspects of nutrition.

At this age level, the pupils are old enough to realize something of how, through research—the use of the controlled experiment—the scientists have and are constantly developing new discoveries which add to our present knowledge of nutrition. This is especially true in the study of the discovery of the various vitamins.

The method, also, in teaching the unit to older pupils may be different in that they are encouraged to consult a greater number of references, and to collect individually from various sources pamphlet material on the topic.

As an approach to the unit, an objective nutrition test may be given to find out the facts actually possessed by the class.

Under the study of such a problem as "How is the Amount of Daily Food Measured?" the concept of the measurement of the amount of food by the use of caloric measurements is introduced for appreciation and for understanding rather than for the development of technique, as, of course, would be given in a home economics class.

Many interesting activities, such as finding out the relative amount of energy used up by such activities as—

the man walking down the street, or the man climbing the stairs;

the boy sitting and reading, or the boy skating;

the girl lying down, or the girl sitting and knitting;

are concrete instances of the possible needs for energy foods.

We are fortunate in our Department to have several nutritionists as consultants not only in factual material but also for assistance in the development of visual aids. I am reminded here of a set of such posters which they have made along this line which visualize in a pictorial way the amount of energy used up by such an activity as a girl dancing or skating or knitting; a boy playing football and other various activities.

Our experience convinced us that particularly in the secondary school do we need to emphasize the amount of food as well as the kind, for it is at this age that boys and girls are most likely to begin to slight certain foods and not to have their full intake of necessary food each day.

One of our most interesting activities along this line is to have each pupil list the various ways in which he spent calories in the past twenty-four hours. And then to have them make a list of all the foods they ate and check with the use of scientific references as to the amount of the calories in such foods.

Such objective teaching is far more valuable than lecturing to youth on health values.

In connection with the study of the proper amount of food, causes of overweight and underweight are studied and the dangers of reducing medicines and diet investigated.

A study of a balanced diet is possibly the most important problem of the unit, for it is under this problem that the pupil gathers together a study of food in relation to himself and works out his own criteria for an adequate daily diet. The pamphlet reference,

"A Measuring Stick for Good Nutrition," written by our nutrition staff has helped the pupil to fit his food needs into three regular meals a day.

The assistance of the home economics teacher should be sought here in helping pupils to plan menus. Posters should be made which illustrate specifically the combination of foods in a good breakfast, a good dinner, and a good supper. Also discussions may take place in the class as to factors other than food which influence nutrition. It is suggested that each pupil make out a daily time budget, showing the relative time spent in sleeping, eating, recreation, etc.; each pupil also making a spherical graph which illustrates a well-balanced day.

Since we are always more interested in practice than in theory, the high school cafeteria offers possibly our best single opportunity for the teaching of nutrition. There should be closely integrated learnings going on all the time between cafeteria practices and classroom teaching for nutrition. Pupils are to be encouraged to make out score cards for checking the system as to the adequacy of lunches served in their school cafeteria and, as an experiment to get permission from the lunch room manager to allow a committee of pupils to check on certain days the trays of pupils.

In fact, we consider the practices developed in the high school cafeteria to be so important that it has become one of the major consultation services which our State Department of Public Health offers through its consultants in nutrition to the schools in the state.

If nutrition teachings are delimited and built in a spiral way, beginning even in the middle elementary grades, there are many places where nutrition should appear as an integrated but specific learning in related fields.

But integrated health teaching requires cooperative planning as well as a broad, scientific background in the basic health sciences. It is especially important that teachers avail themselves of an up-to-date knowledge of the science of nutrition.

* * * * *

Teacher Examinations,—The school committees in Shrewsbury, Whitinsville, and the Brookfields have adopted a regulation requiring all teachers before appointment to show evidence of a negative chest x-ray. The school clinics now offer x-ray service to all teachers in the towns covered. Contact Between The Massachusetts Department of Public Health and School Health Administrators and Medical Officers, October, 1940, p. 6.

THE INTER-RELATIONSHIPS OF HEALTH AND PHYSICAL EDUCATION*

JOSEPH E. RAYCROFT, M.D.
Professor Emeritus, Princeton University

I was much pleased to receive an invitation to take part in the joint session arranged by the program committee for the discussion of a topic so important as the Inter-relationships of College Health and Physical Education.

The growth in the size and influence of these two organizations is astonishing even to one like myself who has had for many years an active part in their proceedings. It is not so long ago that a group of twenty or so—many of them medically trained—attending a meeting of the College Directors' Society would represent a majority of its members; and a relatively short time has passed since a little group of four or five men met in Chicago to organize the Student Health Association.

The development of this new organization was the outcome of a feeling on the part of some of the men that the programs in the older Society were tending to lay too much emphasis upon the consideration of activity programs and allied question, and that too little attention was being given to the specific medical and health interests and needs of college students. We felt that greater emphasis should be placed upon function, instead of structure, in physical examinations; the development of a clinical service that would correspond more closely with modern medical practice; that more attention should be given to the prevention and treatment of injuries incident to our rapidly growing program of competitive athletics; and, finally, to the recognition and treatment of personality difficulties and maladjustments which were becoming more numerous and important. Add to these factors the increasing needs for instruction, in the rudiments at least, of healthy living which for years had been carried on more or less efficiently by some of the medically trained college directors, but which tended to receive less attention as other duties became more pressing. These criticisms should not lead us to overlook the fact that Dr. Edwin Fauver called to our attention some years ago, namely, that the older generations of doctors in charge of college departments of

* Presented before the twentieth annual meeting of the American Student Health Association, New York City, December 29, 1939. The Journal-Lancet, June, 1940, p. 270.

physical education were the ones who established a medical service for students, gave instruction in the hygiene of their time, and initiated the theory and practice of periodic medical examinations.

However, as colleges increased in size—some of them beyond existing provision for housing and instruction—student life became more complex; intercollegiate athletics assumed greater importance; required courses in physical training and personal hygiene tended to become perfunctory and failed to satisfy the fundamental needs of the average student; the values of intra-mural athletics were not generally recognized; and medical service in dispensary and infirmary was as a rule limited to the immediate physical condition presented by the student and had little if any concern or contact with other phases of the general program.

Efforts to satisfy the needs of the students under these changing conditions involved increases in service and staff—and it is no wonder that differentiation and specialization of personnel, functions, objectives, and services gradually developed in a field that should be closely coordinated and focused upon the needs of the student as an integrated person.

The girls' institutions were, and are, better off in these respects, by reason of a greater wisdom or better luck, because their problem was not complicated by an intercollegiate athletic system. Agnes Wayman recognizes this fact in her statement:[1] "The women in physical education have been very fortunate for the most part, in not being handicapped in their planning by over-emphasis upon intercollegiate competition and the exploitation of their activities for publicity purposes. They have been almost entirely free to develop their programs along educational lines."

Don't misunderstand me—I am not crying down athletics as such, nor intercollegiate competition. I have gained too much from my experience as competitor and coach in intercollegiate sports to fail to recognize and appreciate the values inherent in such activities. I am criticizing the intensity of their development in a relatively small group of students and the exaggeration of their importance as a part—for too many a major part—of a college experience to the virtual neglect of those students who haven't the ability to make one of the big teams.

As a consequence of the factors mentioned and others similar to them, the tendency toward a differentiation of interest, emphasis,

1. A Modern Philosophy of Physical Education, W. B. Saunders Co.

and function grew more marked in the work and development in these two organizations, and even in various phases of the programs of the organizations themselves—each group in its own little orbit—in spite of efforts made to keep these various activities coordinated and focused on the individual student.

It is not difficult to understand how this dispersion came about —human nature being what it is—inasmuch as it was in principle, at least, in harmony with the programs of mental training in colleges where each department hands out its prescription and material to the student, who is left to digest and assimilate the various portions of intellectual pabulum as best he may.

It is a long way from this condition to the concept of the ideal university represented by Mark Hopkins at one end of a log dealing with the intellectual demands and the all-around personality development of a student at the other end of the log. It should be noted, however, that in some institutions of higher learning efforts to correlate the work of various departments in a given field are meeting with gratifying success. The purpose of this symposium is—I take it—to discuss and formulate a basis for a similar development in our own special fields to the end that the work of the various specialists in health and physical education may be coordinated so that their efforts will be as sharply focused on the needs and capacities of the individual student, as if these various services were rendered by one person.

Now, it appears to me that the foregoing discussion points clearly to the necessity for the re-establishment of a cooperative relationship among the different phases of health and physical education so that the results of their joint efforts may be even more useful for the average student. But there is another reason that makes this recommendation even more important; that is, the necessity for a coordination of efforts made on behalf of the student who is emotionally immature when he comes to college and is subject to personality difficulties of one sort or another.

Now this is not a new problem. It deserves, however, to be given particular attention because the proportion of students handicapped by conditions of this type has increased with considerable rapidity during recent years, and particularly because they frequently appear in students who are intellectually talented—but over-conscientious and sensitive.

Reliable studies of young persons during the past twenty years or so indicate that there is an increase in the number of

adolescents who are unequally developed; i. e., physically and intellectually they correspond with chronological age, while emotionally they are untrained and immature. Students of personality are of the opinion that the underlying cause for the existence in physically sound persons of emotional instabilities, undesirable attitudes, indifference, combativeness, and other signs of maladjustment have their roots in childhood. These characteristics may exist in varying degrees, may persist throughout life—serving as points of weakness under stress and strain—or they may be replaced by more desirable qualities in a different environment under more favorable influences and as a result of a process of re-education. I emphasize—re-education!

In any event, the responsibility for the development of these traits is generally attributed to the profound changes that have commonly taken place in family life and relationships. It is important to realize that this phenomenon is quite as apparent in families that are comfortably well off as it is in the very rich or the poor, and is even more marked in the girl than in the boy.

For many generations, parents of all classes were in a position to fulfill their functions as natural educators of the child's emotional life; while the school teacher furnished the systematic training of the child's understanding and intelligence. In other words, these two processes went along side by side. But as the family life has changed under modern conditions, the influence of the family has lessened, and more responsibility has fallen upon the school to recognize and provide for the needs in the emotional training of the child. General education has not yet fully realized this need—nor is it equipped to satisfy it.

In addition to these general changes, there are other specific factors in early life that tend to interfere with normal emotional control; i. e., over-protection by either or both parents; deprivation of initiative; "broken" family; financial troubles; or such conditions as: physical inferiority or handicap, endocrine disturbance, stammering, etc.

These factors serve as the ground-work of personality problems: emotional immaturity, anxieties and tensions, feelings of inferiority, introspection, intolerance of criticism, irresponsibility, evasiveness, lying and inability to face unpleasant facts.

Such types of personality react badly under pressure of academic or social competition, family or financial difficulties. These stresses commonly find their expression in worry, intro-

spection, insomnia, and procrastination, or body protests such as eye trouble, digestive or cardiac upsets, asthma or other symptoms for which no physical cause can be found.

For such persons the modern college presents a brand new set of problems and responsibilities. The boy or girl who comes directly from the well ordered, closely supervised life of the "prep" school, or the student who has lived under home influences while attending day school, finds himself abruptly confronted by freedoms and responsibilities with which he is quite unfamiliar. His program of courses is much broader. His ability to make wise choice is undeveloped, and unless he is unusually fortunate he has not yet decided upon his major line of interest among the many possibilities that are available. This new situation calls for planning, decisions, and self-guidance that furnish opportunities for mistakes that may represent serious handicaps to his progress. However wisely he may plan his program, he still is confronted with a heavier load of work assignment, more independent reading than he is accustomed to, and generally is lacking in experience in digesting what he reads and in taking useful notes on lectures.

Add to these problems the necessity for the wise use of leisure time, and it becomes obvious that the youth who has not learned how to budget his time and energy is in great need of help and guidance, particularly during his first year—and in some cases well along through his course. These conditions, though touched upon in barest outline, represent a very severe test of the character and judgment of the student and the ability to plan and work effectively without undue emotional stress and strain.

These emotionally immature students stand these experiences badly and, unless the underlying reasons are recognized early and adequate treatment made available, the result may be a real mental breakdown—or at best loss of confidence and a crippled personality struggling against heavy and uncorrected handicaps.

In the course of the past fifty or seventy-five years, carefully controlled studies of individuals—young and mature—have furnished us with a reliable body of knowledge about physical growth and development and about physical health and its modifying factors. These studies have been supplemented by the development in recent years, to which I have referred, of a better understanding of inter-relationships of physical, mental, and emotional factors in an individual. In other words, the development of a concept of the wholeness and unity of the personality.

Every function, coordination, attitude, or faculty that we possess is developed to its capacity in only *one way,* and this is by suitable activity and experience. The most effective way to correct emotional instabilities, lack of confidence, fears, and apprehensions in the face of emergencies is by guarded explanation, encouragement, and activities in competition or cooperation with others. In other words, the situation is *not satisfied* by an *examination* and a *diagnosis*—this situation calls for wise and active guidance in a program of training for the development of, and experience in, the ability to initiate and maintain *consistent effort* in study or in other activities. (Significantly enough in this connection, the Greek word for "effort" comes from the same root as the word "athlete.)

I am aware of the fact that studies along these lines are already being made in some institutions, but I am inclined to think that their importance is not generally recognized and that their value as a basis for the formulation of objectives and procedures in our work is not fully realized.

Here is a field of education generally unrecognized and neglected that is quite as important for the happiness and success of the individual as his intellectual attainments. Also, it is a field in which the doctor, the athletic coach, the leader of physical training, and the student advisor can by teamwork and cooperation make a contribution to the training and development of the individual that will equip him for competition in a highly competitive society. Finally, there is the invaluable factor in the college situation that is composed of the combination of a stimulating new environment and a youth whose patterns of life, emotions, attitudes, and behavior are still plastic.

Never again in the life of the individual will there appear an opportunity so favorable for the identification of personality difficulties and their modification by wise supervision and direction.

Nowhere is there such a multitude of hurdles for the well adjusted student to take in his stride, or for the less stable to balk at or stumble over. And, by the same token, no one so fortunate as the college doctor, who is in a position to observe the student from day to day in his reactions to these situations—and to judge whether or not his advice and the program being conducted by his associates in dealing with the case are proving effective.

No sensible person will attempt to tell another who is trained in a field of work how to run his job. So I make no attempt to

discuss the details of an effort to coordinate the services of these two organizations in their attack on this problem. In the nature of things these will vary according to the types of cases recognized and the staff personalities involved.

I do, however, direct the attention of these two organizations to this educational problem of paramount importance, and emphasize the necessity of coordinated effort for its solution.

No one else in the educational set-up has really recognized the situation or could deal with it objectively; and no other group is so favorably located and so well equipped as the members of these two groups before me to recognize these personality problems and to deal with them intelligently and effectively.*

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PROGRAM COMMITTEE—1941 MEETING

EARL E. KLEINSCHMIDT, M.D.
Chairman, Program Committee, 1941 *Meeting*

The Program Committee will appreciate any suggestions from the membership as to suitable topics to be discussed at the 1941 meeting in Atlantic City. It will also appreciate information concerning health programs and research projects that would be of general interest.

From information gathered thus far, it would appear that some members of the Association favor the inclusion of more papers concerned with the practical aspects of school health work. Health problems of children living in rural areas have also been mentioned as needing greater emphasis.

The Committee is also desirous of obtaining suggestions as to suitable methods of presentation. The conventional method of presenting a paper on a given subject is open to dispute as the one most likely to succeed in holding the attention of an audience. The 1940 meeting convinced even the most skeptical of the merits of the panel method of discussion; and who can forget the hearing on Anytown School Health Budget?

Won't you write and give us your viewpoint on the above-mentioned problems? Your Committee is endeavoring to continue the high standards set by the Detroit meeting, and with *your* help, it can succeed.

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* Much that Dr. Raycroft says is equally applicable to the secondary school level.—Ed.

STUDENT ACCIDENTS*

ALVAN D. BATTEY
Statistician, National Safety Council

The accident record for last school year, September, 1939 to May, 1940, may be briefly summarized as follows: 23,250 accidents were recorded in school systems with a total enrollment of 832,500. These accidents resulted in absence from school of one-half day or more, or required the attention of a physician. Absence from school, in total, amounted to about 68,500 days.

If the other schools in the U. S. had about the same accident experience as those sending reports to the National Safety Council, the national total of absence from school last year would be about 2,300,000 days. It is more likely, however, that schools cooperating with the Council have developed greater interest in the safety of pupils, particularly during the hours they are away from school, than most of the other schools, and that the safety education programs reflect it. The national total of absence due to accidents probably was considerable in excess of 2,300,000 days, perhaps amounting to 3,000,000 or more. This total is equivalent to the continuous absence from school of 17,000 pupils, or of all the pupils in a city of 80,000 population.

Because of differences in enrollment between grades, or schools, the accident record is best stated in terms of accident rates. The rate most commonly used is the number of accidents per 100,000 students. This rate for the school year 1939-40, for all grades, was 15.8.

There was a great variation from grade to grade in the accident rate. In the kindergarten it was 5.4, only one-third the rate

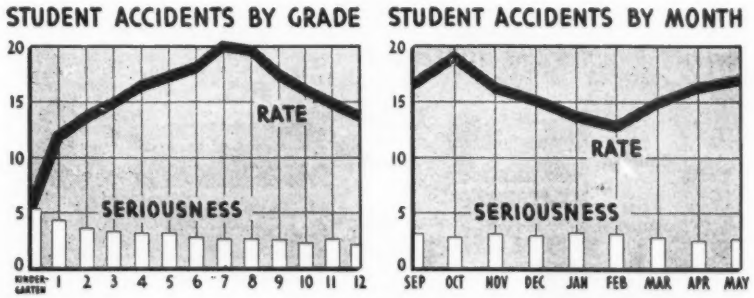

TABLE A

* Reprinted from Safety Education, November, 1940, p. 114.

for all grades. This was probably in large part the result of careful supervision and protection given these very young children both at school and at home. In the first grade the rate jumped to 11.9. In suceeding grades it rose less rapidly, reaching a maximum of 20.0 in the seventh grade. The trend was steadily downward in the high school, with a rate of 13.8 recorded for the twelfth grade.

The five principal types of student accidents, and their 1939-40 rates, were as follows:

School buildings	2.9
School grounds	2.7
To or from school	1.1
Home	4.0
Others	5.1

The importance of each type varied considerably with the grade of the students. The school building accident rate increased slowly from 1.2 in the first grade to 2.1 in the sixth; then jumped to 4.1 in the seventh and 5.3 in the ninth. It then decreased, reaching 3.6 in the twelfth. Gymnasium and school shop accidents in the junior and senior high school grades accounted for a large part of the increase after the sixth grade, although corridor and stair accidents also showed a considerable advance.

The rates indicated a somewhat more even distribution of accidents for school grounds. The first grade rate of 1.8 was followed by a gradual increase to 3.2 in the sixth. In the seventh the rate rose to 3.7, but in the eighth it returned to 3.3. Thereafter it varied between 2.6 and 3.1. About 40 per cent of these accidents occurred during unorganized play—more than were recorded for athletics.

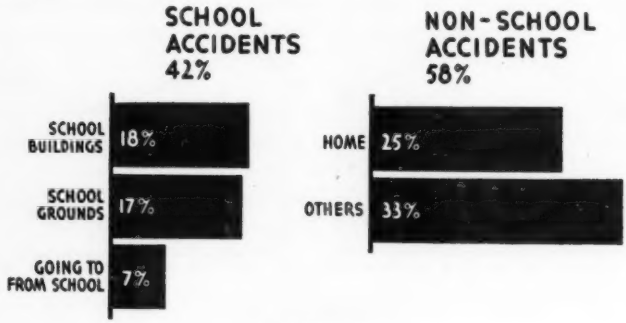

TABLE B

Accidents on the way to or from school were much less frequent than other types in most grades, and the rates showed less variation from grade to grade. The lowest rates were 0.5 in the kindergarten and 0.6 in the twelfth. The highest was 1.3 in the first, second, seventh and eighth.

The rates for accidents on home premises were relatively high in all grades. Even for kindergarten pupils it amounted to 2.3. From the first grade to the eighth the rate was never less than 4.0 and it never rose above 5.1, indicating a fairly uniform degree of hazard. High school students had a considerably better experience, with rates varying from 3.2 for the ninth to 2.1 for the twelfth. Approximately 40 per cent of the home accidents were falls and 20 per cent cuts and scratches.

The remaining accidents, those occurring away from school or home, made up one-third of all reported cases. The accident rate for all grades of 5.1 almost equalled the rate for school buildings and school grounds together. In the kindergarten it was only 1.5, but it increased rapidly from 3.3 in the first to 6.4 in the fifth. From the fifth to the eighth it ran between 6.3 and 6.8, then decreased steadily to 4.4 in the twelfth. Only 16 per cent of these cases were motor vehicle accidents. Thirty-one per cent were other street and sidewalk accidents, 12 per cent occurred on playgrounds and 41 per cent at other places.

Absence from school averaged 2.9 days per accident. The time lost was considerably greater for the younger pupils, however, and somewhat less for the older ones. In the kindergarten the average absence was 5.6 days per accident, in the first grade 4.2 days and in the second grade 3.6 days. Succeeding grades showed smaller decreases, but even in the twelfth absence amounted to 2.1 days.

NUMBER OF STUDENT ACCIDENTS

and Rates per 100,000 Student Days—September 1939 to May, 1940 (Enrollment included 832,500)

Grades	Total		School Bldgs.		School Grounds		Going to or from School		Home		Other	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
ALL GRADES	23,250	15.8	4,240	2.9	3,960	2.7	1,628	1.1	5,812	4.0	7,610	5.1
Kindergarten	381	5.4	53	0.8	24	0.3	35	0.5	163	2.3	106	1.5
First	1,872	11.9	134	1.2	209	1.8	155	1.3	495	4.3	379	3.3
Second	1,470	13.6	111	1.0	257	2.4	141	1.3	496	4.6	465	4.3
Third	1,615	14.9	138	1.3	272	2.5	133	1.2	550	5.1	522	4.8
Fourth	2,019	16.6	178	1.5	354	2.9	170	1.4	625	5.1	692	5.7
Fifth	2,106	17.2	221	1.8	389	3.2	140	1.1	579	4.7	777	6.4
Sixth	2,209	18.1	261	2.1	454	3.7	141	1.2	581	4.8	772	6.3
Seventh	2,495	20.0	514	4.1	413	3.3	165	1.3	563	4.5	840	6.8
Eighth	2,330	19.6	557	4.7	356	3.0	153	1.3	477	4.0	787	6.6
Ninth	2,296	17.6	691	5.3	353	2.7	120	0.9	416	3.2	716	5.5
Tenth	1,761	16.1	506	4.6	281	2.6	113	1.0	324	3.0	537	4.9
Eleventh	1,335	14.9	335	3.7	239	2.7	64	0.7	253	2.8	444	5.0
Twelfth	1,100	13.8	283	3.6	245	3.1	47	0.6	170	2.1	355	4.4
Unclassified*	761	14.5	258	4.9	114	2.2	51	0.9	120	2.3	218	4.2

* Includes ungraded and vocational school students.

There were 72 accidental deaths during the school year among the 832,500 students covered by the reports, or one death among each 11,600 students. Only one of these accidents occurred on school property. This was the case of a boy who attempted to climb up the outside of a fire escape, but fell on a spike of an iron railing below.

Thirty-four deaths resulted from motor vehicle accidents; 10 while the pupils were on the way to or from school and 24 at other times. In three instances boys were riding bicycles when struck.

* * * * *

Accident Prevention,—One of the big commercial organizations that has a lot of cars on the road—here a few years ago they came to the conclusion they were having too many accidents. One of the things they did—they gave out notice that any employee that had more'n a certain number of accidents would lose his job. Of course, some ways, that seems like kind of a drastic measure; not quite fair and so on. Some of these people that're always having accidents—they usually have an alibi: the accidents are unavoidable; it's the other fellow's fault and all that. But, the same time, the way their accident rate went down—it was like one time in the winter somebody came on old Judge Kinney sitting in the middle of the sidewalk. "Well," they said, "how'd you get there?" "That's a question I haven't gone into," the Judge says, "but I'm here, notwithstanding." So, even unavoidable accidents—it appeared they could be avoided, a lot of 'em could, when the incentive was strong enough.

"Of course accidents'll happen, like they say, in the best regulated families. But when the same fellow has one after another, it's a pretty sure sign there's something wrong with him, and if he can't correct it, then he ought not to be driving a car. In these days, the way traffic conditions are, an incompetent driver shouldn't be allowed on the road any more'n they'd turn a smallpox patient loose to go shopping. We have regulations about keeping pigs on the corporation and all that but—why say! you could have a dozen pigs in the middle of Main Street for five years and they wouldn't menace health as much as one of these fellows could in five minutes. "Doctor Jones" Says, in Health News, New York State Department of Health, October 7, 1940, p. 170.

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News Item,—Dr. Leo H. Mynes, Medical Director of the Kanawha County Schools, Charleston, was made president of the West Virginia Tuberculosis and Health Association at their annual meeting at Clarksburg, September 20th.

EDITORIALS

Our Challenge,—This nation today is confronted with a peremptory challenge, the challenge to preserve—nay to strengthen—our way of life. After years of easy-going acceptance of the blessings of freedom we suddenly find that freedom in peril. We find that wealth, power, prestige do not in themselves guarantee safety and security. We find ourselves with twenty billions of gold stored away, but few soldiers and fewer guns with which to defend that gold.

In a world turned topsy-turvy by the ruthless ambitions of power-hungry dictators, we realize that democracy must be strong if it is to survive. In total preparedness for total defense, guns, ships, planes, and trained soldiers are necessary, but not alone sufficient to secure national safety. For such an effort we need physical strength, mental fortitude, and moral stamina for every man, woman, and child in the nation. In the last analysis, it is the morale of a people that insures victory. No nation is conquered until its morale is cracked. Finland was not conquered. China is not conquered.

Our schools are the cradle of democracy. The ideals taught in the schools are the sustaining philosophy of the nation. The physical stamina built into our school children is the bulwark of our people. The self-discipline inculcated is our insurance of steadfast patriotism and willingness to sacrifice for the good of our society.

In the dark days ahead, we shall be called on to redouble our efforts to strengthen the bodies, toughen the minds, and reinforce the morale of ourselves and the youth in our care. This task calls for an intensified program of health education. If sound health habits are necessary for a nation at peace, they are doubly so for a nation at war: and we are at war, though our soldiers are not firing at any foe: we are fighting a preparedness war—an economic war against aggression.

Boys who but yesterday were in high schools are manning the controls of planes that may some day defend our shores. The standard for airplane pilots is so high that only a small percentage of these boys can qualify.

Let us set our standards high. Let us try to graduate from our high schools boys who will meet the physical, mental, and moral standards required of airplane pilots. Let us, with Emerson, "hitch our wagon to a star." Health News of the Los Angeles City School District, October 1940, p. 3.

When the aunt of David Copperfield entered him in school, the headmaster asked her why she wished him to go to school. Her answer was—and this seems to set an ideal in education that all too frequently is missed—"To make the child happy and useful."

The much discussed list of purposes of education has at its head Health. School administrators prate of this, but in a huge proportion of their schools Health receives only lip service. This is especially true in the secondary schools. An adequate health service, with physicians, nurses, and other health workers regularly and daily on the job is rare. Health instruction often is not officially in the curriculum at all, and when it is, rarely does it function so as materially to affect the daily activities and habits—and after all health is merely a way of living—of these adolescents who are so bewildered by the life and distractions about them.

In a large proportion of these schools too, physical education is a farce. In many, the concept of a successful physical education program is a winning football or basketball team on which the town sports may safely bet. Any concept that the school owes safety and protection to these boys seems wholly lacking. Even when there is opportunity for all to participate in supervised school physical activities, the program is often poorly planned, and seemingly set up as entertainment rather than as an opportunity for education of the body and for building health. Lack of sensible scheduling is not the least of the failures. To pour large groups of unclassified pupils—freshmen, seniors, and others in the same class period—into a gymnasium whose only visible equipment is a set of basketball goals, is largely a waste of the pupils' time and of the public money.

Unless pupils can be made healthful, and have opportunity to participate in a healthful activity program, they can not reach their highest potentialities of happiness. If they do not attain health and happiness, they will fail to attain the love of school, community, and country upon which loyalty and therefore the defense of liberty must rest. They will be neither happy nor useful.

To be "socially competent" means much more than the training and ability necessary to earn a living. Health includes "physical strength, mental fortitude ,and moral stamina." These are the foundation of education and of *morale*.—C.H.K.

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ABSTRACTS

Color in the Classroom,—A color scheme in salmon pink, canary yellow, and powder blue is being tried out in the Central Grade School at Ironwood, Mich., in the hope that it will have a stimulating psychological effect on the pupils and put them in the mood to study.

The idea is to achieve color effects with light pastel tones that will make the children alert. The innovator of this plan is Aare Lahti, a native of Ironwood. After he had tested out the color combinations, Mrs. Lahti, a student of psychology, made tests with children that seemed to show that certain pastel shades actually transported them out of dull moods. Accordingly, the experiment was attempted under a school painting and renovating project of the Works Projects Administration.

The Lahtis' color scheme revolves around a salmon shade at the base of the walls which reflects light. The color is composed of vermillion and a light and medium chrome yellow. In a room which has an abundance of light, or a room with light from two directions, the salmon is combined with a blue which absorbs light. In a room which has less light, on the north side for instance, the salmon color is worked with a canary yellow which reflects the light.

In order to avoid a clash of colors, white or neutral bulletin boards are placed over the blackboards when the boards are not in use, and white and green furniture replaces the usual school brown. It is the Lahtis' theory that light from outside strikes the salmon color, is reflected upward to the canary yellow which in turn throws it upward to the white ceiling or distributes it throughout the room. When indirect lighting units are used on dark days and at night, the light strikes the ceiling and is then distributed. Even the ceiling, which appears to be an ordinary white, is specially mixed. Actually it contains small amounts of vermillion and pink so that the harshness is taken out of the white.

A. E. Erickson, superintendent of Ironwood schools, is enthusiastic over the idea. "It's an effort to escape from the drabness of most classrooms," he said, "and the dull state of mind that sometimes results from it.

"In addition to the new painting job, we shall have bright new desks—not the dirty old brown ones, covered with schoolroom brown, but bright new ones showing the grain of the wood. We are sure the students will appreciate this, and also be less likely to carve their names on them.

"I am positive that the new non-glare light will be more easy on the eyes, and more cheerful for studying. I think that we shall have excellent results."

Henry LaMarche, WPA foreman in charge of the painting job, also has been converted to the new color scheme. "I was very skeptical at first," he admitted, "for I have been painting 45 years, but I find that I have never painted a room that is so easy on the eyes. I am anxious to know what the children will say." The American School Board Journal, Volume 101, Number 5, November, 1940, Donald Cameron, pages 20 and 87. * * * * *

Colors and Mood,—In some mental hospitals, particularly in Illinois, wards and isolation rooms are painted in a particular manner. Yellow rooms for mildly depressed patients, and red ones to stimulate those with more severe cases of melancholia, particularly is suicidal. For overactive patients, blue and certain shades of green rooms are provided in milder cases, violet and purple for the agitated and overexcited ones. Purple, by the way, is generally said to be a very good soporific, though it is too strong a hue for ordinary people who want only to rest their nerves; it easily produces melancholic reactions.

Color psychology is not exactly new, for its practical applications can be traced back for centuries, and many observations have been made on the effects of different colors on the human mind. But new about it is the fact that more and more people now begin to consider it as an important aid in the vast field of mental hygiene.

Grossly it can be said that blue, green, and violet are restful, calm the nerves, and help overcome excitement, while red, yellow, and orange stimulated. Often the various reds, yellows, and oranges provoke feelings of displeasure in many people. On the other hand, the group headed by red represents the so-called "warm colors," while the different blues and some of the greens are "cold colors."

Crook and Hipps report that when the cafeteria of a factory in New York was decorated in light blue the women workers complained of being cold and wore their coats, but the thermometer showed that the temperature was exactly the same there as all over the factory. The decorator returned and added orange baseboards and orange slip covers for the chairs. The complaints of chilliness ceased.

Of course, the old psychology of the dark which depresses and the light which cheers up expresses a truth which still holds, though the modern trend in color psychology goes much further, as we have already seen.

A certain bridge in London was formerly black, and suicides were frequent there. After it was painted green, suicides decreased sharply. Irving remarks wittily, "If your office is musty brown and your secretary an advocate of midnight blue dresses, these colors are all conspiring to depress you. Fill a few shelves with red or yellow books. Or a few summer flowers."

But an earnest warning. Colors are not the same thing as colored light! Painted walls or colored cloths hanging around are not the same thing as colored electric bulbs or stained window glass. Colored light is dangerous. It probably causes real organic changes in the body. Its effects are now under scientific investigation. Surprising results are expected, but it is better to leave it alone until the nature and intensity of its influence have been determined to a satisfactory extent. John F. Oliven, M.D., Mental Hygiene News, New York State Department of Mental Hygiene, September, 1940, p. 4.

* * * * *

Hazards in Foods,—Paradoxical as it may seem, there are more health hazards in the preparation and handling of foods in the home and in public dining services than in their production and processing in commercial plants.

One of the immediate problems in food control is the prevention of contamination of food that has been properly prepared but is improperly served. Much of the care and direct expense that may be incurred in the preparation and processing of a high quality food may be wasted by the carelessness practiced in dispensing or retailing it.

The most potent agent of infection of food is man himself. The germs of many communicable diseases may be present in the human nose, mouth, throat and genito-urinary and gastrointestinal tracts. The hands are probably the commonest means of introducing germs into food. They carry probably the most extensive and varied bacterial flora of any part of the body.

Other agents that may be involved are vermin (rats, various types of roaches, ants, flies, and other insects) and atmospheric dirt (such as dust, soot, and cinder).

All equipment that comes in contact with foods should be constructed in accordance with modern principles of sanitation. Good indications of the effectiveness of the cleaning operations are the absence of visible dirt or food residues, freedom from a greasy feel and the absence of odors.

An important item is the provision of adequate toilet and washing facilities for the employes. If the hands are to be washed thoroughly during each absence from food handling, then hot water, soap, nail brush, and ample time are necessary. Signs should be posted to remind employes to wash their hands when contaminated.

The health and physical condition of each employe should be carefully supervised. A daily checkup of the health of the employes by the foreman or superintendent will usually reveal conditions pointing to the need for medical attention. Such an employe should not be penalized by the loss of wages during medical consultation or absence resulting from illness; otherwise he may seek to hide symptoms that should be revealed.

The medical examination should show whether the pupil has ever had typhoid fever. If he has had it, he should not be employed where he will come into direct contact with foods. Routine immunizations against typhoid fever would probably be worth while.

By application of the tuberculin test and x-raying the positives, open tuberculosis could be eliminated. With the Shick test, susceptibility to diphtheria could be determined, with immunization if positive. The Dick test would determine susceptibility to scarlet fever with a rash but could not eliminate those cases that many consider to be scarlet fever without a rash.

All foods should be handled with implements, whenever possible. Persons preparing salads, sandwiches and foods to be eaten unheated should take as much care as possible to avoid touching the ingredients with their hands.

The employes should be informed in the principles of personal hygiene. This should be followed up by regular instruction to keep the personnel sensitive to the importance of sanitation as a health measure and as a good will builder.

Rats do not stay where they are not fed. If all food in storage is kept covered, and if all scraps are carefully collected at the end of the day, rats will leave the premises. More positive methods must be used for removing bugs. Poisoned bait will eliminate them but food must be kept inaccessible to them. No poisoned bait should be used unless it is colored with a dye which would reveal its presence if accidentally used. Flies must be removed by continuous and systematic efforts. All outdoor openings must be screened and sticky fly paper, preferably hanging in strips, should be kept in continuous use and removed before it becomes odious.

Employes cannot be held responsible for cleanliness, sanitation, and quality of food products unless they are given proper materials

to work with, adequate light to see what they are doing, intelligent instruction in the sanitary objectives, and a sympathetic understanding by the management concerning the problems involved in the local operations. J. H. Shrader, The Nation's Schools, February, 1940. Abstracted by R. J. Jirinec, M.D.

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Refresher Courses Attract Dentists,—A total of ninety-eight practicing dentists representing forty-three counties in the State received training during the seven one-week refresher courses in children's dentistry conducted during May, June, and July under the auspices of the Division of Maternity, Infancy and Child Hygiene of the Department.

Facilities for the courses were made available through the cooperation of the Guggenheim Dental Clinic in New York City and the Rochester Dental Dispensary in Rochester. The courses, to which a limited number of dentists from areas of 50,000 population or less were invited, included lectures, laboratory technique classes and clinics where work with children was carried on under supervision. The lectures dealt with diet and dental health, child psychology and child management, anesthesia for children, dental Roentgenology, prophylactic orthodontia, operative procedures associated with children's dentistry, current theories on the etiology of dental caries, and public health dentistry. Before operating in clinics, the students attended laboratory classes where they had an opportunity to review the various types of cavity preparation and to study the morphology of the deciduous teeth by working on plaster and ivorine models. Health News, New York State Department of Health, September 9, 1940, p. 152.

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X-Ray Testing,—To assist the New York trade and vocational schools, now concentrating their efforts upon the training of American boys and girls for defense industries, the Tuberculosis Service of the Health Section, Works Projects Administration in cooperation with the Bureau of Tuberculosis of the Department of Health, has inaugurated a program to insure the health and efficiency of the pupils in training. It is estimated that 50,000 young people will be examined by the staffs of the mobile units during the tuberculosis prevention campaign.

The mobile units use paper x-rays because of the ease and rapidity of the process. 211,000 of them have been taken during the last three years by this Tuberculosis Service among the city schools and colleges, civil service employees and applicants, trade union members, and home relief and transient relief clients. School Management, October 1940, p. 43.

REVIEW

Borrowed Children. Mrs. St. Loe Strachey. The Commonwealth Fund, New York, 1940. Pp. 149. Price $0.75.

This is a discussion of some of the problems that arose and were met, and in so far as possible solved, as a result of the evacuation of three-fourths of a million unaccompanied children of London during the early days of September, 1939. Transplanting this number of children, many of them very young, from an urban and often poverty stricken environment where adequate food, good habits, training in cleanliness and in the proper use of sanitary facilities were often lacking, and throwing them upon rural and small town households, these often unequipped to take care of the extra burden, and those in charge often untrained to handle children in considerable numbers, gave rise to an immensely large group of problems regarding habits, diet, mental attitudes, etc., concerning which those of us who have never been forced to participate in such an evacuation have no concept.

Fears and anxieties arising because of new environment often caused physical and social reactions, which made it well nigh impossible to fit these children into the new surroundings. Homesickness, disciplinary problems, food refusals, and enuresis were only a part of the problems.

To many of those children, this transplantation to a new and often better environment resulted in great benefits. Better and more ample food provided at regular meals, regular hours for rising, and more healthful hours for retiring were among these. Country experiences, where for the first time these children had intimate contact with plants and animals, had great value.

This is a valuable and stirring text. It presents to us in this country some of the problems which are facing England today. On a moderately satisfactory solution depends to a great extent the maintenance of morale among the attacked people.

Charles H. Keene, M.D.

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MEETINGS

American School Health Association and American Public Health Association at Atlantic City, New Jersey, in October, 1941.

American Student Health Association at Ann Arbor, Michigan, December 27 and 28, 1940.

INDEX — Vol. X — 1940

Articles:

Accidents: Student Accidents. Alvan D. Battery. No. 10, Dec. 1940, p. 307.

Adolescent: Studies on Growth and Development of Adolescents and Their Implications For the Health Program of the Adolescent. William W. Greulich, Ph.D. No. 5, May, 1940, p. 133.
Changing Body and Changing Self, Caroline B. Zachry. No. 5, May, 1940, p. 149.
The Adolescent in a Changing World—A Summary. Lawrence K. Frank. No. 5, May, 1940, p. 157.

Basketball: Blood Pressure Studies On Basketball Players in Olean, N. Y. Dr. C. A. Greenleaf. No. 2, Feb., 1940, p. 50.

Blood Pressure: Blood Pressure Studies On Basketball Players in Olean, N. Y. Dr. C. A. Greenleaf. No. 2, Feb., 1940, p. 50.

Cleanliness: A Fourth Grade Unit on Cleanliness. Leila McCabe. No. 7, Sept., 1940, p. 214.

Colds: Common Colds. Naomi C. Turner, Ed.M. No. 4, April, 1940, p. 99.

Corrective: Corrective Work in Physical Education. Alice M. McGrath and William S. Lilly. No. 6, June, 1940, p. 180.

Dance: The Dance In Education. Edith M. Pruss. No. 6, June, 1940, p. 182.

Dental: An Administrator Cogitates His Dental Health Program. H. D. Chope, M.D., No. 2, Feb., 1940, p. 31.

Dentist: How the Community Dentist Can Participate In a School Dental Program. S. S. Lifson. No. 8, Oct., 1940, p. 234.

Growth: Studies On Growth and Development of Adolescents and Their Implications For the Health Program of the Adolescent. William A. Greulich, Ph.D. No. 5, May, 1940, p. 133.
A Study of the Health of Children Showing Intermittency in Growth. C. E. Turner, Dr. P.H., Sc.D.; Wilfred L. McKenzie, M.B.; Virginia Marston, B.S., C.P.H.; and Pauline C. Christie, A.B., C.P.H. No. 8, Oct., 1940, p. 227.

Health Education: Incentives and Methods In Health Education—Elementary School Level. James Frederick Rogers, M.D. No. 3, March, 1940, p. 65.
Educational and Personal Health. Howard W. Haggard, M.D. No. 3, March, 1940, p. 80.
The Place of Knowledge In Health Education. Lillian B. Davis. No. 7, Sept., 1940, p. 206.
Teaching Hygiene To Slow Pupils. Ethel E. Jones. No. 7, Sept., 1940, p. 208.
Enrichment Material In Hygiene. Freda Woolery. No. 7, Sept., 1940, p. 209.
The Testing Program In Hygiene. Helen Perkins. No. 7, Sept., 1940, p. 212.
A Fourth Grade Unit On Cleanliness. Leila McCabe. No. 7, Sept., 1940, p. 214.
Health Education In The Secondary Schools In Michigan and Its Implications for the College Level. Mabel E. Rugen, Ph.D. No. 9, Nov., 1940, p. 261.

Health Examinations: Frequency of Periodic Health Examinations. James Frederick Rogers, M.D., Dr.P.H. No. 1, Jan, 1940, p. 1.

Health Policies: School Health Policies. Charles C. Wilson, M.D., No. 2, Feb., 1940, p. 44.

Health Program: An Administrator Cogitates His Dental Health Program. H. D. Chope, M.D. No. 2, Feb., 1940, p. 31.
The School Health Program. New York State Association of School Physicians. No. 2, Feb., 1940, p. 40.

Health Service: The Part of a School Physician In An Effective Follow-Up Program. Helen A. Cary, M.D., F.A.P.H.A. No. 1, Jan. 1940, p. 7.
How Can the State Department Help School Health Procedures? B. B. Bagby, M.D. No. 1, Jan., 1940, p. 12.
The Educational Values of Medical Service. Charles C. Wilson, M.D. No. 3, March, 1940, p. 65.
Physicians Part In A School Health Service. Helen A. Cary, M.D., F.A.P.H.A. No. 9, Nov., 1940, p. 257.

Lighting: Saving the Sight of School Children. Pauline Bartlett. No. 2, Feb., 1940, p. 47.

Medical Service: The Educational Values of Medical Service. Charles C. Wilson, M.D., No. 3, March, 1940, p. 65.

Nurse: The Nurse In A Secondary School. Anna R. Foster and Katherine A. Schultz. No. 4, April, 1940, p. 111.
What the School Nurse Does. Mrs. Mary T. Fay. No. 9, Nov., 1940, p. 267.

Nutrition: The School Lunch As An Aid to Health Education. C. C. Hudson, M.D. No. 3, March, 1940, p. 84.
The Integration of Nutrition Instruction In The Secondary Schools. Jean V. Latimer. No. 10, Dec., 1940, p. 294.

Physical Education: How the Physical Education Program Operates In a Typical Junior High School. Louise A. Burnett. No. 6, June, 1940, p. 173.
Corrective Work In Physical Education. Alice M. McGrath and William S. Lilly. No. 6, June, 1940, p. 180.
The Baltimore Achievement Standards In Physical Education. Benjamin G. Kremen. No. 6, June, 1940, p. 175.
A Typical Day In The Supervision Of Elementary Physical Education. Dorothy Horine. No. 6, June, 1940, p. 184.
The Inter-Relationships of Health and Physical Education. Joseph E. Raycroft, M.D. No. 10, Dec., 1940, p. 300.

Physician: Physicians Part In A School Health Service. Helen A. Cary, M.D., F.A.P.H.A. No. 9, Nov. 1940, p. 257.
The Physician As Adviser. Arthur R. Turner, M.D. No. 10, Dec., 1940, p. 287.

Program: The Program of Health and Physical Education In The Baltimore Public Schools. Louis R. Burnett, M.D. No. 4, April, 1940, p. 107.

Progress: Pupil Progress. Pearl E. Britton. No. 4, April, 1940, p. 104.

Relations: Some Things Worth Knowing In Public Relations. Edgar Bieber, M.D. No. 8, Oct., 1940, p. 238.

Special School: The Philosophy Of A Special School. Edward H. Stullken. No. 6, June, 1940, p. 169.
Standards: The Baltimore Achievement Standards In Physical Education. Benjamin G. Kremen. No. 6, June, 1940, p. 175.
Supervision: A Typical Day In The Supervision of Elementary Physical Education. Dorothy Horine. No. 6, June, 1940, p. 184.
Tests: The Baltimore Achievement Standards In Physical Education. Benjamin G. Kremen. No. 6, June, 1940, p. 175.
The Testing Program In Hygiene. Helen Perkins. No. 7, Sept., 1940, p. 212.
Training: In-Service Training Of Teachers. Thelma Suggett. No. 6, June, 1940, p. 167.
Tuberculosis: Report Of The Tuberculosis Committee Of The American School Health Association For 1939. No. 7, Sept., 1940, p. 197.

Personals:

Beaghler, Amos L., M.D. No. 9, p. 272. Burns, Harry B., M.D. No. 6, p. 172. Good, Charles F., M.D. No. 7, p. 207. Gudakunst, Don W., M.D. No. 6, p. 172. Howe, William A., M.D., No. 8, pp. 233, 247. Ireland, Allen G., M.D. No. 10, p. 293. Karlstrom, Arthur E., M.D. No. 7, p. 205. Kleinschmidt, Earl E., M.D., Dr. P.H. No. 9, p. 272. Lokrantz, Sven, M.D. No. 4, p. 115. McCurdy, James Huff, M.D. No. 10, p. 293. Mynes, Leo H., M.D. No. 10, p. 310.

Program, Annual:

American School Health Association. Detroit. No. 7, p. 217. No. 8, p. 244.

Resolutions:

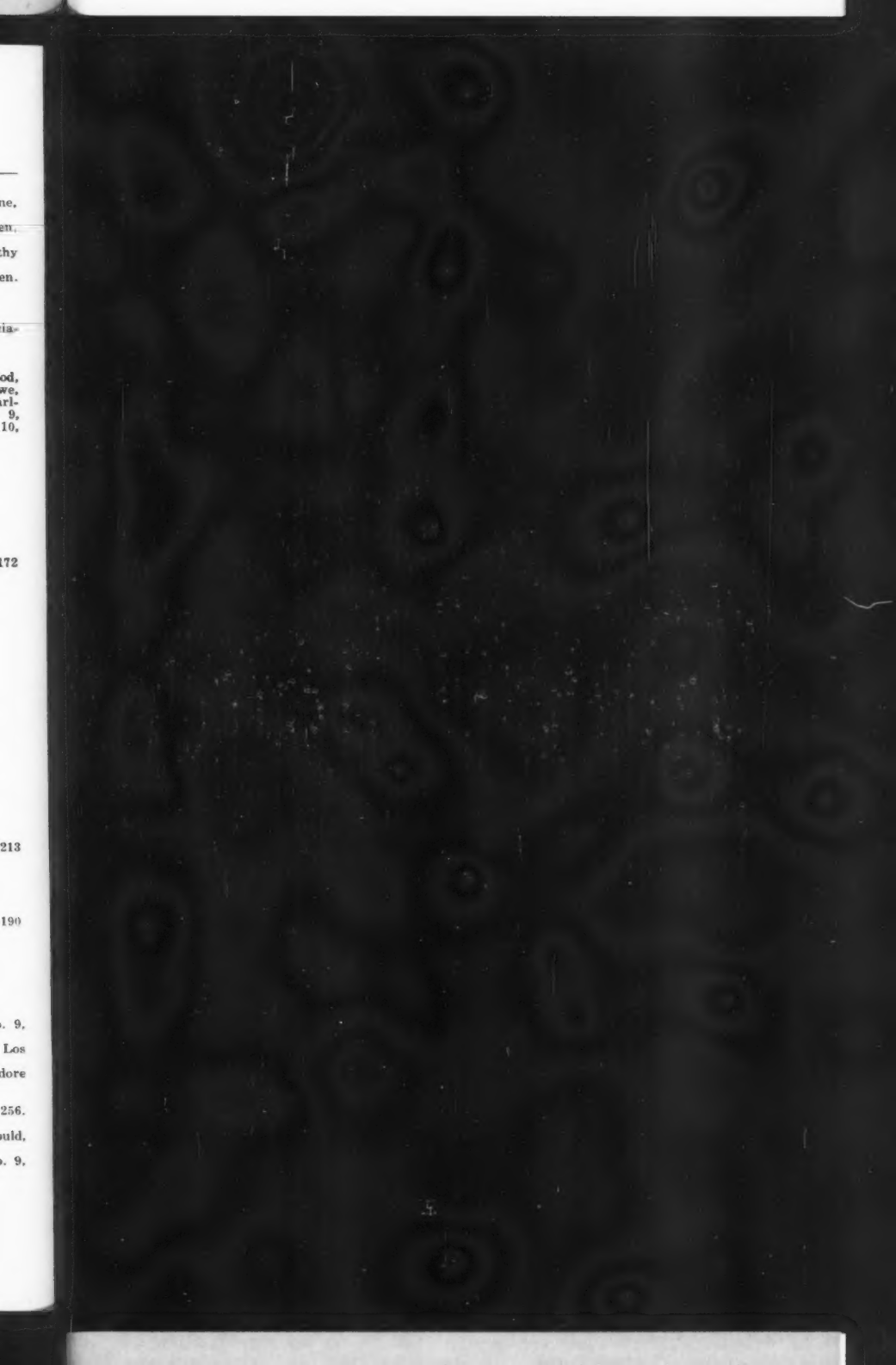
Governing Council Resolutions, 1940. No. 9, p. 269.

Abstracts and Notes:

Accidents: 2.58; 10.310
Biological: 4.131
Blood Pressure: 9.271
Cafeteria: 1.22; 1.26
Communicable: 1.6; 1.11; 4.106; 4.112; 4.120; 7.205; 7.218; 7.202; 10.315
Conference: 3.90
Crippled Children: 5.148
Defects: 1.25
Dental: 1.27
Dentist: 10.317
Diphtheria: 4.106; 4.120; 7.218; 7.220
Exercise: 1.26
Feeblemindedness: 4.131
Food Poisoning: 2.61
Foods: 10.315
Gymnastics: 6.186
Handicapped: 1.18; 1.19; 1.22; 1.22; 1.28; 1.28; 4.131; 5.148
Health Aims: 2.54
Health Center: 6.192
Health Education: 3.98; 4.129; 6.174; 9.260; 9.277
Heaith Examination: 6.189; 9.277
Health Habits: 9.276
Health Program: 9.275; 9.278
Health Service: 1.15; 4.124; 8.243; 9.283
Hearing: 1.22; 1.22; 2.46; 9.283.
Immunizations: 7.218
Infections: 4.124
Lighting: 1.23
Longevity: 3.96; 8.243
Mental Hygiene: 4.116; 4.117; 9.281; 10.314
Mortality: 4.103; 4.127; 6.195
Nurse: 3.91; 3.95; 6.183; 6.194
Nutrition: 1.22; 3.71; 4.123; 4.128; 6.172 7.211; 7.222; 7.225; 8.249; 8.255
Obesity: 7.222
Oldest School House: 4.130
Open Air Classes: 4.118
Pasteurization: 2.62; 4.119
Physical Education: 3.88; 6.186; 9.282
Physical Examinations: 7.213
Pupil Load: 7.216
Rabies: 4.120
Recreation: 9.275
Safety: 9.260
Sanitation: 4.126; 8.250; 8.254; 10.315
Scabies: 4.112
Scarlet Fever: 1.6
School Sickness: 7.223
Scoliosis: 4.121
Sex: 2.46
Skin: 2.60
Stammerer: 1.18; 1.19
Summer Courses: 3.97
Supervision: 4.116
Swimming: 7.222
Teacher: 2.56; 3.93; 3.94; 6.174; 6.189; 7.213 7.216; 7.216; 10.299
Tests: 8.251; 9.276; 9.283
Traffic: 7.205
Training: 1.19; 7.224
Trichinosis: 2.43
Tuberculosis: 2.39; 3.95; 4.103; 6.181; 6.190 7.221; 9.280; 10.317
Vaccination: 2.58; 8.255
Ventilation: 2.60
Vision: 6.174; 9.276

Reviews:

Children of England: Borrowed Children. Mrs. St. Loe Strachey, No. 10, p. 318.
Health Education: Ways To Community Health Education. Ira V. Hiscock. No. 2, p. 64.
Health Activities and Problems. D. Oberteuffer, Ph.D. and P. C. Bechtel, M.D. No. 9, p. 284.
Program For Elementary and Secondary Schools. School Publication No. 330, Los Angeles City Schools, 1940. No. 6, p. 196.
Health Problems: School Health Problems. Laurence B. Chenoweth, A.B., M.D., and Theodore K. Selkirk, A.B., M.D. No. 2, p. 63.
Health Program: Health For High School Pupils. William Schmidt. No. 7, p. 225.
Hearing: Complete Guide For the Deafened. A. F. Niemoeller, A.B., M.A., B.S. No. 8, p. 256.
Handbook of Hearing Aids. A. F. Niemoeller, A.B., M.A., B.S. No. 8, p. 256.
Hygiene: A College Textbook of Hygiene. Dean F. Smiley, A.B., M.D., and Adrian G. Gould, Ph.B., M.D. No. 8, p. 256.
Mosquito: Mosquito Control. William B. Herms, Sc.D., and Harold F. Gray, Gr. P.H. No. 9, p. 284.
Nurse: The Public Health Nurse and Her Patient. Ruth Gilbert. No. 9, p. 283.
Nursing: Supervision In Public Health Nursing. Violet H. Hodgson. No. 1, p. 29.
Rheumatic: Rheumatic Fever. May G. Wilson, M. D. No. 9, p. 284.
Sex: High Schools and Sex Education. Richard W. Weiser, M.D. No. 1, p. 28.



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